
System Terminal

System Terminal helps you perform overlay-based tasks directly through the Meridian 1 TTY interface. System Terminal provides on-line, context sensitive help for overlays, prompts, and error messages.

There are two versions of System Terminal to support two different connection types—Ethernet or PPP and Serial—as follows:

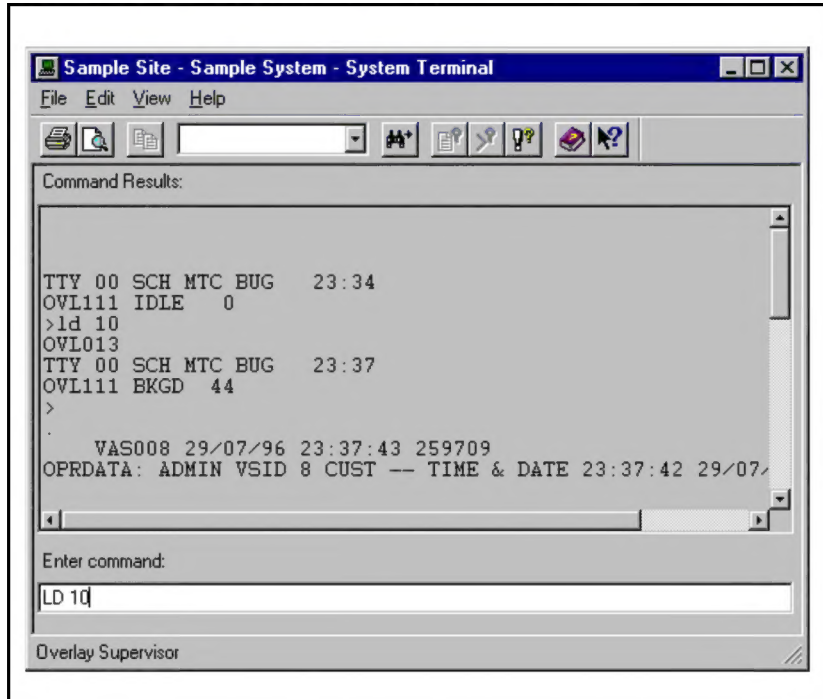
- Overlay Passthru is available on X11 release 22 and later systems connected to MAT using Ethernet or PPP. Overlay Passthru only supports access to the overlays.
- VT220 provides similar functions for any Meridian 1 system using serial connections, as well as terminal emulation for all application modules (such as Meridian Mail). VT220 is discussed in “VT220” on page 121.

In release 22 and later switches, you access the overlays using the System Terminal (Ethernet or PPP required) and access the application modules via VT220. In pre-release 22 switches, you access both the overlays and application modules via VT220.

Launching System Terminal (Ethernet or PPP required)

Once you connect to the system of interest, launch System Terminal by selecting **System Terminal** from the **Maintenance** menu or toolbar in the System window. Enter your system user ID and password in the System Login dialog. Figure 54 shows the System Terminal window.

Figure 54
System Terminal window <System.tif>



The System Terminal window displays all system events as they occur. It also gives you direct access to any overlay.

Note 1: For Ethernet or PPP connections, each active System Terminal connection requires a pseudo-TTY (PTY) port. PTYs are software-only I/O ports. The System Terminal and Maintenance Windows applications use these ports to access the overlays. A message informs you if the window is not currently available.

Note 2: Ethernet and PPP are available only for Release 22 and above X11 software with packages 296 and 243 equipped. See “MAT 5 Communications Requirements” on page 145.

System Terminal window

The System Terminal window includes the following:

- An **Enter Command** edit box in which you type overlay commands
- A **Command Results** list box that displays your interaction with the overlays and the results
- Links to on-line help are available for the following:
 - Help on the current overlay
 - Help on the current prompt
 - Help on the last or selected error message
 - One-line description of prompts in the status bar

You use overlays just as you did before MAT 5 was available. The one minor difference is that you type into an edit box rather than the last line of the screen as with TTY and Terminal Emulation applications. You still use the **<Enter>** key to send the typed-in data (an overlay command or response to a prompt).

Using System Terminal

You can do the following from System Terminal:

- Load an overlay as you normally would on a TTY or Terminal Emulation application
- Cut or copy system events or overlay command results to the clipboard
- Save or capture the command results to a file
- Get help on a Meridian 1 error message
- Get help on an overlay
- Get help on a prompt
- Monitor system events

Advantages over a TTY

You now have the following advantages over the old TTY:

- You can type in lower case and use the backspace key
- **Copy** and **Paste** in the **Enter** Command box (useful for repeated commands with only a TN change)
- Scroll back in the command results
- **Copy** and **Print** the command results
- Capture output to a file as well as to the screen
- **Save** the command results to a file

Getting help on the current overlay

You can get more help on the currently loaded overlay using the **Current Overlay** command in the **Help** menu. The help file is organized in a similar fashion to the *I/O Guide*.

Note: The **Current Overlay** button or menu item is disabled when you are not in an overlay.

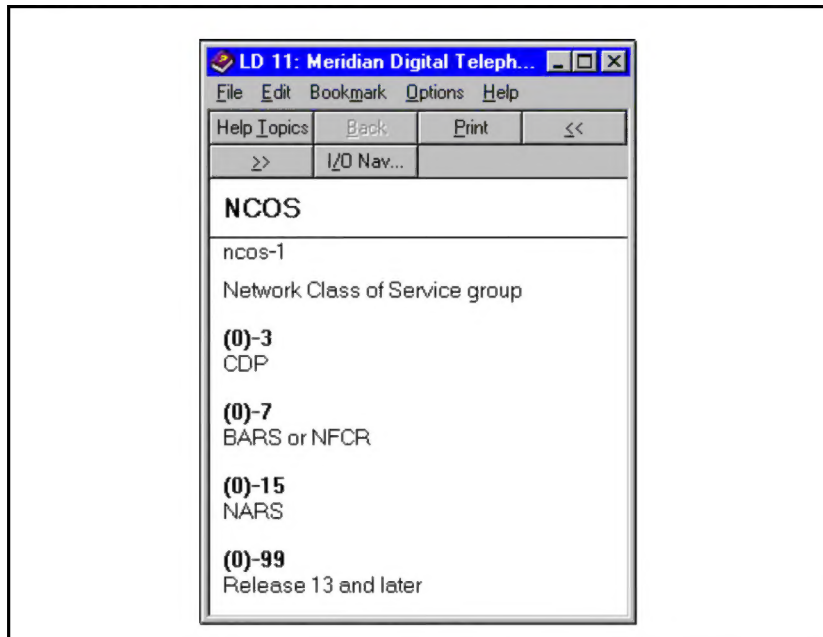
Example

If you are in overlay 10, you can select **Current Overlay** from the **Help** menu, and then navigate within help to the **CPND** prompt sequence. You can click on any prompt in the sequence. This displays the help window for that prompt—the same as help on **Current Prompt**.

Getting help on the current prompt

Figure 55 shows an example of the help you can get on an administration overlay. You load the overlay and respond to the prompts, one at a time. This help guides you as you load the overlay and respond to the prompts.

Figure 55
Current prompt help example



If an overlay is currently loaded, the Status Bar at the bottom of the window provides a short description of the current prompt.

If the one-line description is not enough, you can read a full description of the prompt in Windows Help. Choose **Current Prompt** from the Help menu.

Note: Help on the current prompt is disabled if you are not in an administration overlay.

To get help on any other prompt choose **I/O Navigator** from the Help menu.

Getting help on an error message

System Terminal can distinguish error messages from the other text in the **Command Results** list box. The **Error Message** command in the **Help** menu provides the error description in Windows Help.

You can get help on an error message in the following ways:

- Double-click an error message anywhere in the Command Results.
- Select the **Error message** command in the **Help** menu to get help on the last error message (even if it is scrolled off the screen).
- Select an error message anywhere in the Command Results, then select the **Error message** command in the **Help** menu.
- Select the **I/O Navigator** from the **Help** menu.

The error message help window appears when you select the **Error message** command in the **Help** menu.

Note: You can also get help on Meridian Mail System Error and Event Reporting (SEER) messages using the I/O Navigator.

System Terminal Menus

The System Terminal window includes the following menus in the menu bar—keyboard shortcuts are shown after the command names:

Table 17
File menu

Command	Description
Print <Ctrl>P	Prints the command results.
Print Preview	Displays the information on the screen as it would appear in print.
Print Setup	Selects a printer and printer connection.
Save As	Saves the current set of command results to a file. This command performs a one-time save, unlike the Capture command which continues saving new command results to the file as they occur.
Capture	Captures new command results as they occur and saves them to a file.
Close	Closes the System Terminal window.

Table 18
Edit menu

Command	Description
Cut <Ctrl>X	Deletes selected text and stores it on the clipboard.
Copy <Ctrl>C	Moves a copy of selected text to the clipboard. Copy is especially useful when you need to enter many similar commands. Simply copy a command from the Command Results area and paste it in to the Enter Command field, then edit where necessary.
Paste <Ctrl>V	Inserts the clipboard contents into the Enter Command field.
Clear Command Results	Deletes all text in the Command Results area.
Select All <Ctrl>A	Selects all text in the Command Results area.

Table 19
View menu

Command	Description
Status Bar	Displays or hides the Status Bar. A check mark appears next to the command when the Status Bar is displayed.
Toolbar	Displays or hides the Toolbar. A check mark appears next to the command when the Toolbar is displayed.

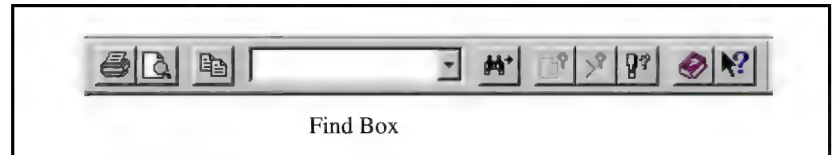
Table 20
Help menu

Command	Description
Help Topics	Displays an index of help topics
What's This?	Provides context-sensitive help on any pull-down menu command or toolbar button. Clicking anywhere else takes you to the first topic in the help topic list. This operation is also available in the right mouse button popup menu.
Current Overlay	Displays general help topics for the overlay that is currently loaded. For help on another overlay, use the I/O Navigator command in the Help menu. The Current Overlay command is unavailable when no overlay is currently loaded.
Current Prompt <Ctrl>Q	Displays help on the current prompt while in an administration overlay. The Status Bar also provides a short description of the current prompt.
Error Message <Ctrl>E	Displays help for the selected error message in the Command Results area or the last error message if nothing is selected.
I/O Navigator <Ctrl>G	Displays a dialog box that allows you to quickly jump to help on any overlay, prompt, command, or error message.
About System Terminal	Displays version information on this release of the application.

Toolbar

The System Terminal toolbar offers several useful shortcuts to the menu commands. See Figure 56.

Figure 56
System Terminal toolbar



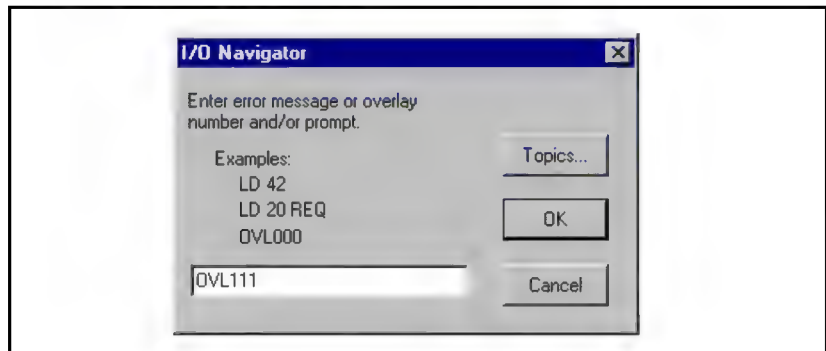
Note: The **Find** and **Find Next** icons in the toolbar allow you to search the Command Results for the text string that you enter in the **Find box**. **Find** is case-sensitive. The search begins at the current location.

Using the I/O Navigator

The I/O Navigator displays a dialog box that allows you to quickly jump to help on any overlay, prompt, command, or error message. Select **I/O Navigator** from the overlay's **Help** menu or from the **I/O Navigator** buttons in the appropriate Help files.

The I/O Navigator allows you to navigate through I/O reference help independent of your current context within the overlays. For example, you do not need to be logged into a system to look up an error message using the I/O Navigator. See Figure 57.

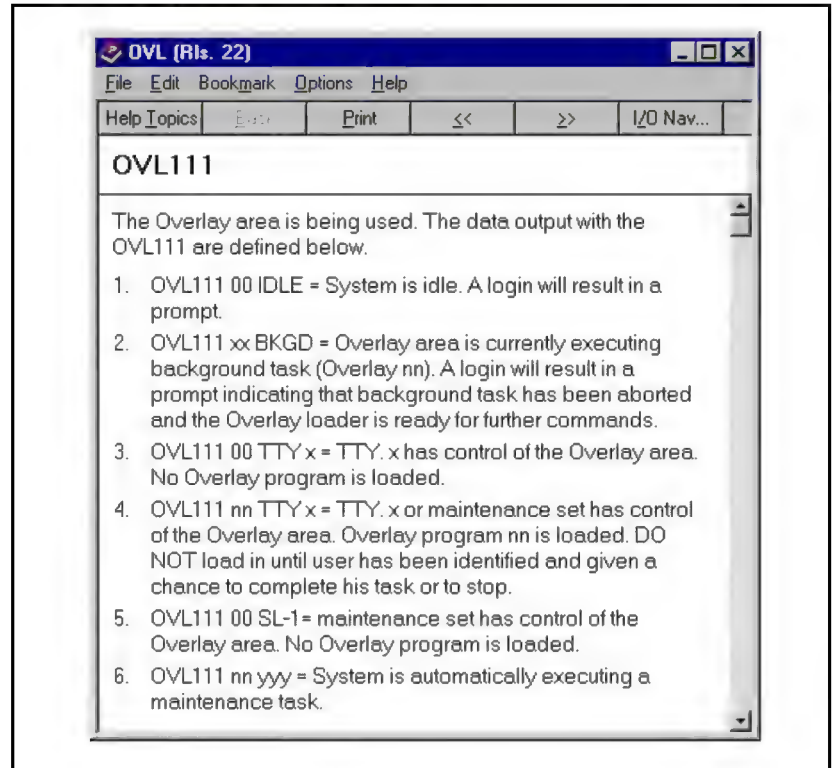
Figure 57
I/O Navigator dialog



Type the overlay number, error message number, or prompt in the text entry field and click **OK**. Help information for the specified overlay, prompt, or error message appears.

The **Topics** button displays the general reference Help index. See Figure 58.

Figure 58
Example Help Index for an Overlay



The **Cancel** button cancels a search.

Entering an overlay (LD XX) or error code mnemonic (ERR, BUG) takes you to the contents page of the appropriate help file. Entering the error code (BUG3001) or an LD number and a prompt takes you to the Help topic page.

- If the prompt or error message you specify does not exist, the help search dialog appears with the nearest match selected.
- If the overlay number or error message type do not exist, a “Help file not found” information dialog appears.
- The **I/O Navigator** command can be used from within Help. You do not need to be connected to a switch.
- There are some combination overlays (for example, one help file describes two overlays). You can enter either of the overlay numbers. These cases are:
 - LD 36 and LD 41
 - LD 40 and LD 42
 - LD 20, LD 21, and LD 22
 - LD 84 and LD 85
- Leading zeros are not required in error messages. For example, entering SCH22 or SCH022 will find the description for SCH0022.
- To look up Meridian Mail System Error and Event Reporting (SEER) messages, enter XXXYY (where XXX is the message class, and YY is the message number—no mnemonic is required). For example, enter 11102.

VT220

The VT220 application models the VT100/220/320 series of terminals to set up communications between your PC and the Meridian 1. With VT220, you can connect to the Meridian 1 using a serial, PPP (point to point protocol), or Ethernet connection. It supports the transfer of ASCII data during a communications session and provides normal TTY and VT220 access to overlays that are not supported by the MAT applications

Features

VT220 supports the following features:

- Double-height, double-width, blinking, bold and underlined characters
- Complete graphic character set, including a special font for representing control characters
- Scrolling regions
- 80 and 132 column modes
- Echo, no echo, local mode and autowrap on/off
- Reverse video characters and reverse video screen
- Cursor types—block, underline, vertical line, or none
- Selectable cursor blink rate
- User-definable Tab stops
- Programmable function keys
- Display control mode
- National character sets

Accessing VT220

Before accessing VT220, you must first select the type of terminal emulation session you require. To do so, perform the following steps:

- 1 Click once on the system name in the MAT Navigator to highlight it and click **Properties** from the File drop-down menu (or simply right-click on the system name and click **Properties**).
- 2 From the System Properties window, click the **Communications** tab and select the desired settings file from the Terminal Emulation VT220 Settings drop-down list box (e.g., MMAIL.INI).
- 3 Click the **Applications** tab and click once on **System Terminal (VT220)** in the Applications list box to highlight it.
- 4 Select a communications profile for System Terminal (VT220) by clicking on the desired profile name in the Communications Profile drop-down list box.
- 5 Click OK to select these settings and return to the MAT Navigator.

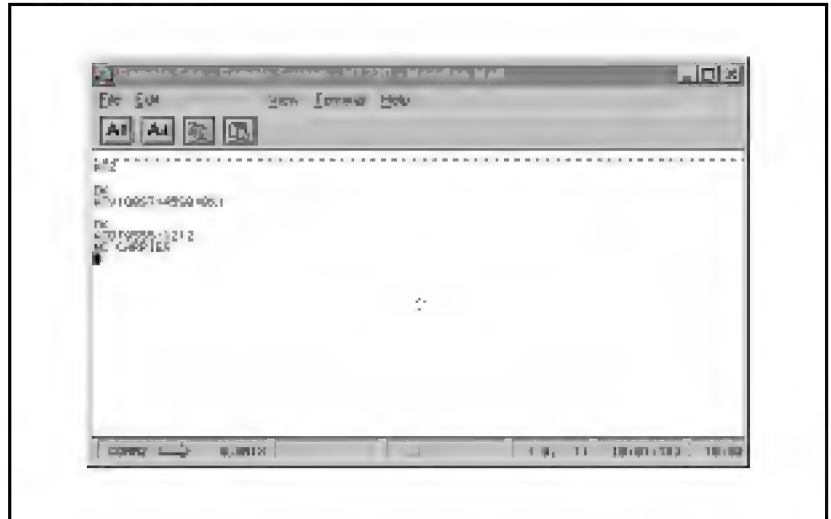
To access VT220, perform the following steps:

- 1 From the MAT Navigator, select the desired site and system and click **System Terminal** from the Maintenance drop-down menu.
- 2 From the System Terminal Selection dialog which appears, click **Serial (VT220)** and click **OK**.

VT220 will attempt to connect to the terminal based on the communications criteria entered in the System Properties Serial Communications Profile for this system. Once it establishes this connection, the VT220 main window will appear listing the commands and graphical tools required for the emulation session. See Figure 59.

The following sections will briefly list the main functions of VT220.

Figure 59
VT220 window



File menu

The File menu contains functions used to save the VT220 configuration, print the contents of the terminal window, record and replay VT220 terminal emulation sessions and close the system.

The following is a summary of these functions:

- Save Configuration
- Save Configuration As
- Print
- Print Setup
- Printer Fonts
- Capture
- Playback
- Close

The **Save Configuration** and **Save Configuration As** menu items are only available if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT System Properties Communications tab). Otherwise, they will appear grayed.

Edit menu

The Edit menu contains editing commands used to manipulate the text appearing in the main window.

The following is a summary of these functions:

- Copy
- Paste
- Select All

Configuration menu

Once you start VT220 from the system window of the MAT Navigator with a user defined type of terminal (as defined as the **Other** VT220 type from the MAT System Properties Communications tab), then you can use the Configuration functions to customize the VT220 settings to suit your needs. The purpose of having the 'Other' type is to allow you to create multiple types of settings based on generic settings.

If you do not select 'Other' or a user defined type, then you will not require these functions to run VT220. The Configuration command will therefore appear grayed.

Before you can customize the VT220 settings, you must first select the custom VT220 settings file OTHER.INI using the Communications tab from the MAT Navigator System Properties application. Refer to "Accessing VT220" on page 122 for more details on selecting this option. This file appears in the VT220 settings drop-down list box. When you launch VT220 from this customizable terminal, you can then use the commands which appear in the Configuration drop-down menu to change the settings for VT220.

Once you have edited the VT220 settings using these functions, you must then save the customized configuration file using the **Save Configuration As** command. Using this command, you can enter the name of this configuration file for use in later sessions.

VT220 includes a number of setting files which are predefined depending on the system to which you are connected. For example, M1.INI is a predefined setting file used for a VT220 terminal emulation session with the Meridian 1, and MMAIL.INI is a predefined setting file for Meridian Mail. These setting files provide the required VT220 settings and cannot be edited.

The following is a summary of the Configuration functions:

- Terminal Setup
- National Replacement Character Set
- Map Keyboard
- Program Keys
- Tab Setup
- Options
- Status Bar

View menu

The View menu contains toggles to adjust the display of the VT220 window as well as hide and display the Tool Bar, Status Bar and Keys Window.

The following is a summary of these toggles:

- Terminal
- Hide/Show Tool Bar
- Hide/Show Status Bar
- Hide/Show Keys Window

Terminal menu

The **Terminal** menu contains commands used to connect and disconnect VT220 for a temporary communications setup. The **Connect** and **Disconnect** commands start and stop the terminal emulation. The **Temporary Communication Setup** function temporarily creates a terminal emulation session based on customizable connection criteria. This setup is only temporary for the current session. When you access VT220 again, it will use the criteria defined for this system in the MAT **System Configuration** function.

The following is a summary of these commands:

- Connect
- Disconnect
- Temporary Communication Setup

Help Menu

In addition to the standard on-line help features for VT220, this **Help** menu contains topics which provide help with the Overlay Enhancer and I/O error messages.

The following is a summary of these Help items:

- Help Topics
- Current Overlay
- Current Prompt
- Error Message
- I/O Navigator
- About VT220

The **Help Topics** menu item will display the help topics for VT220 only if you have selected a user defined terminal type (as defined as the 'Other' VT220 type from the MAT System Properties Communications tab). Otherwise, it will display the help topics for the Meridian 1 system.

The **Current Overlay**, **Current Prompt** and **Error Message** menu items are only enabled if you are running a VT220 terminal emulation for the M1.INI terminal type and the system is in overlay mode.

The I/O Navigator **Help** function allows you to obtain information on specific error messages.

The **Overlay Enhancer** is an on-line context sensitive help function which allows you to obtain quick and direct access to overlay information while in an active terminal session with the Meridian 1.

The following Overlay Enhancer Help commands appear in the Help drop-down menu:

- Current Overlay
- Current Prompt
- Error Message

The **Current Overlay** and **Current Prompt** commands are only available if an overlay program is loaded and the terminal session is of type 'Meridian 1', 'Serial Meridian 1', 'PPP', or 'Ethernet'. Otherwise, they will be disabled and will appear grayed. The **Error Message** command will be available if the terminal session is of type 'Serial Meridian 1', 'PPP', or 'Ethernet' 'Meridian 1'. Otherwise, it will be disabled and will appear grayed.

Note: Selecting an error message in the VT220 window is not sufficient to access the Overlay Enhancer help. Unlike the Overlay Passthru application which displays on-line help when you double-click the error message, the VT220 help requires that you first double-click the error message and then click **Error Message** from the Help drop-down menu. This will then display help for the selected error message

Keyboard Mappings

The following tables list the keyboard mappings for VT220 on standard 101 and 102 key keyboards.:

Table 21
Keyboard Mappings - VT Key

VT Key	PC Key
PF1	Num Lock
PF2	Numpad Slash
PF3	Numpad Start
PF4	Numpad Minus
Find	Insert
Insert	Home
Select	Delete
Up Arrow	Up Arrow
Down Arrow	Down Arrow
Left Arrow	Left Arrow
Right Arrow	Right Arrow
F6	F6
F7	F7
F8	F8
F9	F9
F10	F10

Table 21 (Continued)
Keyboard Mappings - VT Key

VT Key	PC Key
F11	F11
F12	F12
F13	Sys Rq
F14	Scroll Lock
Help	F2
Do	F3
F17	Ctrl-F7
F18	Ctrl-F8
F19	Ctrl-F9
F20	Ctrl-F10

Table 22
Keyboard Mappings - VT Action

VT Key	PC Key
Remove	Page Up
Next Screen	Page Down
Prev Screen	End
Hold Screen	F1
Compose	Unmapped
Delete	Backspace
Keypad Command	Numpad Plus
Keypad Enter	Numpad Enter
Break	F5
Long Break	Shift-F5
Control Break	Ctrl-F5
Print Screen	Unmapped
Keypad 0	Numpad 0
Keypad 1	Numpad 1

Table 22 (Continued)
Keyboard Mappings - VT Action

VT Key	PC Key
Keypad 2	Numpad 2
Keypad 3	Numpad 3
Keypad 4	Numpad 4
Keypad 5	Numpad 5
Keypad 6	Numpad 6
Keypad 7	Numpad 7
Keypad 8	Numpad 8
Keypad 9	Numpad 9
Keypad Minus	Ctrl-Numpad Minus
Keypad Period	Numpad Del

Table 23
Keyboard Mappings - VT Action Scroll

VT Key	PC Key
Scroll Left	Ctrl-Left Arrow
Scroll Right	Ctrl-Right Arrow
Scroll Up	Ctrl-Up Arrow
Scroll Down	Ctrl-Down Arrow